**Chapter 1:**

Photoshop displays images in bitmap (BMP) images. It also displays the colors in a red, blue, green mode (RGB). If an image on Adobe Photoshop were to be printed, it would be printed in cyan, magenta, yellow and black. (CMYK) Other color modes which can be chosen from are Grayscale, HSB, and Lab. Multichannel, Bitmap. Duotone, and Indexed color are also included in these. Because there are so many different colors, this can cause a misinterpretation on how you see your image on the computer, and how it prints. It is also important to calibrate your display. There are two types: CRT and (more commonly) LCD. To calibrate either display, you use white point, black point and gamma settings. A correct color space must also be chosen in order to properly work in Photoshop. Afterwards, make sure all other Adobe programs are in the same setting.

**Chapter 2:**

This chapter begins with several different rules of thumb to know before buying a camera, and which settings to use once you get one. Because there are so many varieties of cameras and settings, there will always be one to fit your specific needs. After taking a picture, you can save it on Photoshop, but to do this, you must choose the correct resolution if saving in a JPEG format. When saving a JPEG photo to be printed, you must choose the resolution. Higher resolutions have much finer and detailed pictures, but also have larger files, and thus larger loading times. Smaller resolutions have the opposite. When saving a file for web, however, the resolution is always 72 ppi. When opening a new Photoshop file, you can adjust the resolution, color mode, image size, the background content, and several other items. These can be saved with a preset so they are not needed to be changed upon each new file opening. Saving a file in Photoshop is very easy, by just clicking File > Save As to save a new file, and just File > Save in order to save a previous file. A file can turn back to its last save by going to File > Revert. If you wish to save a file without editing the original, go to File > Save As, and change the name of the file. Finally, you can end a work session by clicking an “x” on the document tab, or going to File > Close. This opens up a prompt if i t was modified after it was last saved. Click “No/Don’t Save” to not save, and Yes/Save to save. Closing Photoshop is as easy as going to File > Exit. Any open files in Photoshop will close, and you will be prompted if any have not been saved since last modifications.

**Chapter 3:**

This chapter begins with launching Adobe Bridge, a specific part of the Adobe suite, which allows you to learn use several programs from the suite and manipulates all of them in order to create the best possible image. Launching bridge is as simple as clicking the Adobe Bridge button, and using at allows you to download photos from a camera, as well as letting you easily view/organize images in folders. Comparing and contrasting images, becomes very easy with bridge, because it allows you to place the images side-by-side. If you don’t want to use the entire “Bridge” program, there is a mini-bridge that y9ou can open in Photoshop so that it takes up less room and memory from your computer. Bridge isn’t only restricted to Photoshop either. It can be used in a variety of programs.

**Chapter 4:**

Camera Raw, the main focus of this chapter, can be used in several different ways. It is a format which allows your changes to pictures to be less destructive, allows for easier noise reduction, and change tones easily. You could also use JPEG or TIFF file formats, but they each have their pros and cons. To open images in Camera Raw, you click the “Open in Camera Raw” button on the Bridge toolbar. There are several different tools in camera raw different from Photoshop, such as Straighten, graduated filters, targeted adjustment, and White Balance

**Chapter 5:**

The main point of chapter five is to discover the main features of the Photoshop interface. With the application frame and document tabs, it will greatly enhance our abilities to manipulate pictures. Also, in this chapter, we will learn how to change the zoom level and screen mode, rotate the canvas view temporarily, configure the panels, choose a workspace, create and save custom workspaces. The application frame house the application bar, the options bar, the menu bar, and the currently open documents. Tabbed documents can be used to easily navigate and organize your workspace. Zoom level can be changed by the Zoom tool, which looks like a magnifying glass. Workspaces can be changed to fit the tools needed for the situation. They can easily be changed on the application bar by clicking the Workspace menu button. Resetting a workspace can also be done in order to restore the workspace to default settings of when it was saved.

**Chapter 6:**

Chapter six explains the functions of several different panels and tools such as the Swatches panel, Masks panel, Brush panel, and the indispensable Layers panel. The tools panel contains over 60 tools and several more buttons. You can spring load your tool by holding down its letter “hotkey”. Since there are so many tools, it allows you to save valuable time by not having to click on the tools, rather, but quickly access your keyboard. Panels can be used to allow adjustments to the picture as well, with the adjustment panels (editing colors), the brushes panel (to change the effect of brushes) and so on, and so forth. The history panel allows you to go back to a certain point before that image was manipulated. Text can also be edited with the character and paragraph panels.

**Chapter 7:**

Pixels are the fundamental basis for any Two-Dimensional computer graphic. They are used in several ways, such as dimensions, canvas size, and resolution of an image. The resolution is measured in ppi, which stands for “pixels per inch.” It is used when printing. The smaller the ppi, the smaller and less exact the image, and same goes for the opposite. Using this to our advantage, we can easily resize scanned images, then reprint them, or upload them onto the web. Using other tools, we can change the canvas size, crop an image, enlarge canvas area, or flip/rotate the image.

**Chapter 8:**

Layers are a very important part of image manipulation. Using layers, you can move specific parts of an image without moving the entire thing, such as text, as well as being able to duplicate certain parts, order the way certain images will be placed on top of each other, and even create all new layers! Layers can be merged (put together one at a time) or flattened (all images and properties are stacked).

**Chapter 9:**

Selection and Masks are the basis of this chapter. Selections are done by using one of the many selection tools. Rectangle/Elliptical Marquee tools, and or one of the lasso tools select objects in different ways. The Rectangle and Elliptical select everything inside its regular selection, whereas the lasso tools make more freeform shapes. If you’ve clicked too much, you can easily deselect the selection. While an object is selected, you can move just that part of the image. You can easily select an object of similar color by using the Quick Selection tool. The Magic Wand tool selects all color in the image of the same color as the one selected. You can also inverse the selection by going to Select > Inverse. Masks can be used to help cover up certain parts of an image to cause a faded effect. You can reduce the opacity of the mask to make parts of the image clearer.

**Chapter 10:**

The History panel is one of the most useful panels in Photoshop, in my opinion. It allows you to quickly go back to a certain change you’ve made, and reverse, or see how it was before the change. You are also allowed to change certain parts of the “history”, and delete changes you’ve made. There is also a History Brush tool which will do around the same thing, but only on certain parts of the image, so let say you only wanted a filter on part, you could apply the filter then use the history tool to “erase” the filter off of where it was.

**Chapter 11:**

Colors are one of the first things we’ve learned when using an Image Manipulation Program. Photoshop goes into much detail with its color though. You can select several different colors with different brightness and saturations as well as selecting different libraries of colors. Different color modes such as RGB, and HSB will allow you to easily see which colors are accessible as well. Blending modes can be combined with colors to create very cool effect. Normal mode leaves the image as is, but there are several images that help the layers “blend” together as the name suggests.

**Chapter 12 & 13:**

Adjustment layers are used to help make a change to an image not permanent, but allow you to see what it looks like without having to backtrack. Adjustments may become permanent but only if the adjustment layer is merged with the original layer. Adjustment layers allow you to safely edit the image without having to worry about dangerous changes. Adjustment layers can be even merged with each other. Continuing with adjustments, they can be used to adjust levels. Levels are used to adjust Shadows, Highlights, or what is in between (midtones). Adjustments can be used with Brightness/Contrast, Photo Filters, Dodging/Burning, or essentially any other adjustment you would like to make. Black and White, Vibrance, Color Balance, and Hue/Saturation changes could also be used.

**Chapter 14:**

Combining Images is probably the most vital thing that Photoshop is all about. Whether it be simple copying/pasting, or placing images on top of layers of each other, Photoshop can allow you to easily blend and combine the images. Using the clipboard is the easiest message. There are several different ways to use the clipboard, such as regular pasting, pasting in place, and also pasting inside a selection. You can even Drag-copy parts of the same image to duplicate specific parts. You could even combine images together using the move tool. Mini-bridge could be used to slide the images on top of the layers as well. Images can be faded to blend more with each other, as well as using the clone stamp tool to re-incorporate parts of an image that was taken out before it was copied.

**Chapter 15:**

The brush tool is one of the most versatile tools in Photoshop. It can be edited through Size, hardiness, Roundness, and even have different shapes or dynamics. It is possible to customize a personal brush, through jitter, spacing, scatter, and so many different options. There’s probably a brush for any situation you could think of. You can create your own bristles for a brush, even if there isn’t. Using paint options, you can make a paint-like brush stroke, instead of solid strokes, too. Brushes aren’t only limited to the brush tool either. You can use the smudge tool eraser tool, and so many other mechanics with the basic brush mechanics.

**Chapter 16:**

Retouching an image can be very easy. You could Match the color to another image if a certain image has a more balanced color/tonal value. If you only want to change a part of the color of an image, you could use the Replace Color command, or even do the Photoshop favorite, whiten teeth or eyes. Surface blue (plus erasing certain parts) can be used to allow some areas to become less/more prominent. You could also retouch images by cloning certain parts using the Clone Stamp, and brushing it over others. The spot healing touch can be used to erase blemishes or discursions from the image. Finally, there is the Red-eye tool, which does just what it name implies, fixes red-eye.